ACTIVE REAL-TIME ALIGNMENT SYSTEM FOR OPTOELECTRONIC (OE) DEVICES

ABSTRACT

A real-time, optoelectronic (OE) alignment system, including a first OE device and a second OE device optically coupled to the first OE device, is disclosed. In an exemplary embodiment of the invention, the alignment system includes a capturing means for maintaining the second OE device in a fixed position. The capturing means further retains the first OE device in optical engagement with the second OE device, with the first OE device further having a plurality of degrees of positional freedom associated therewith. An error detection means generates a positional error signal whenever either of the first and second OE devices has deviated from a desired optical alignment with respect to the other. In addition, an actuation means, responsive to the error detection means, automatically adjusts the position of the first OE device so as to bring said first OE device in the desired optical alignment with said second OE device.